

FIG.1

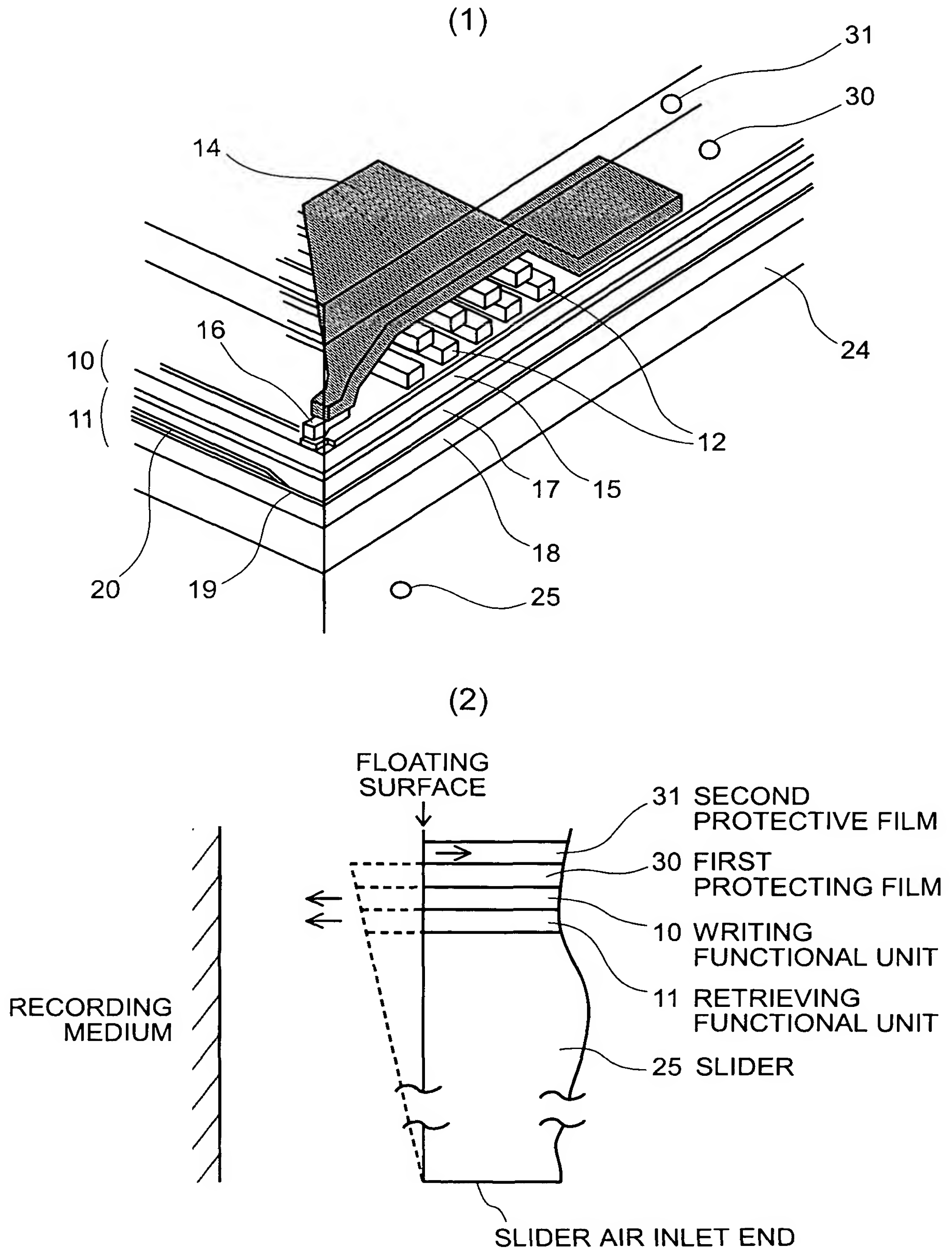


FIG.2

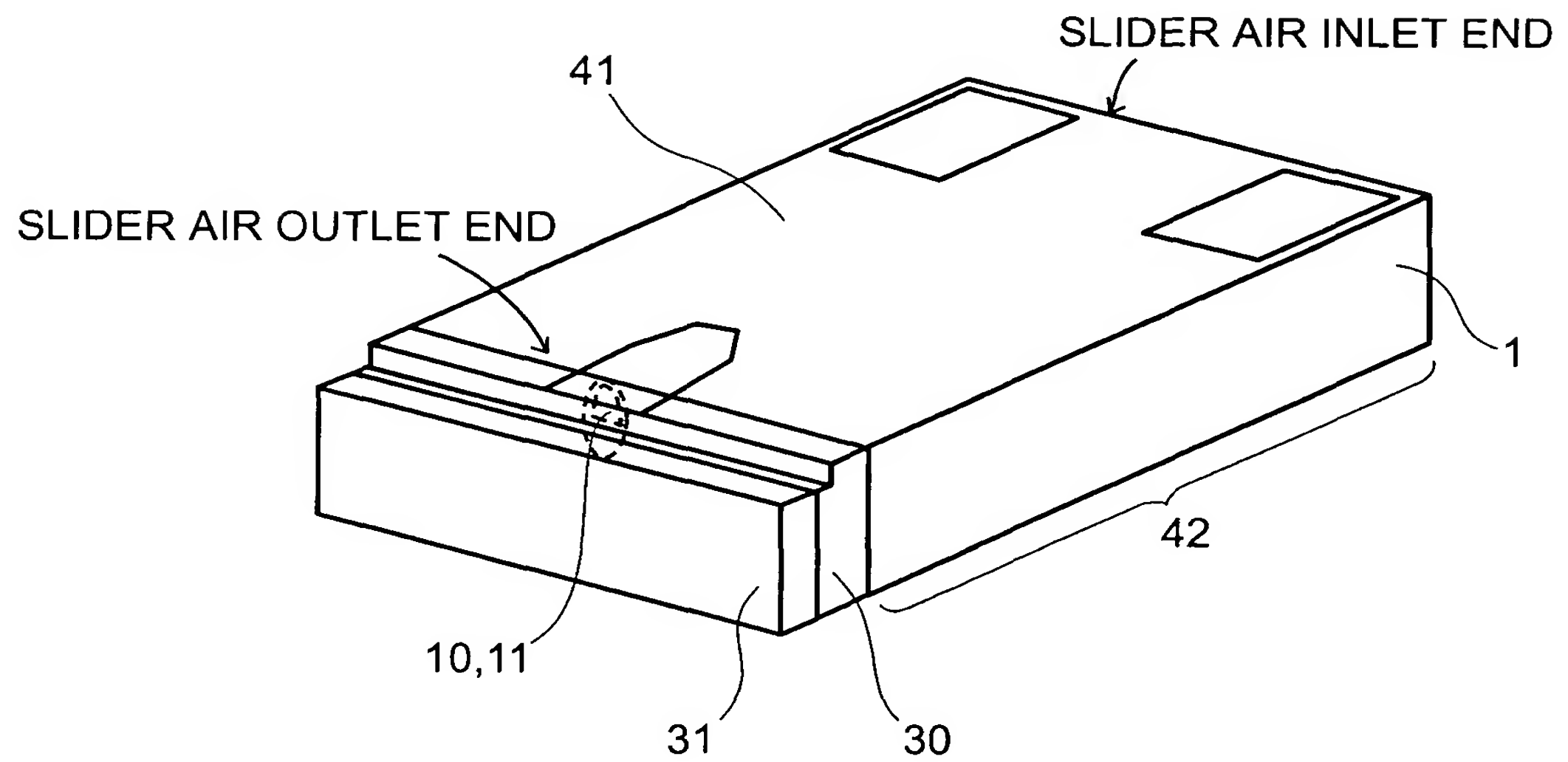


FIG.3

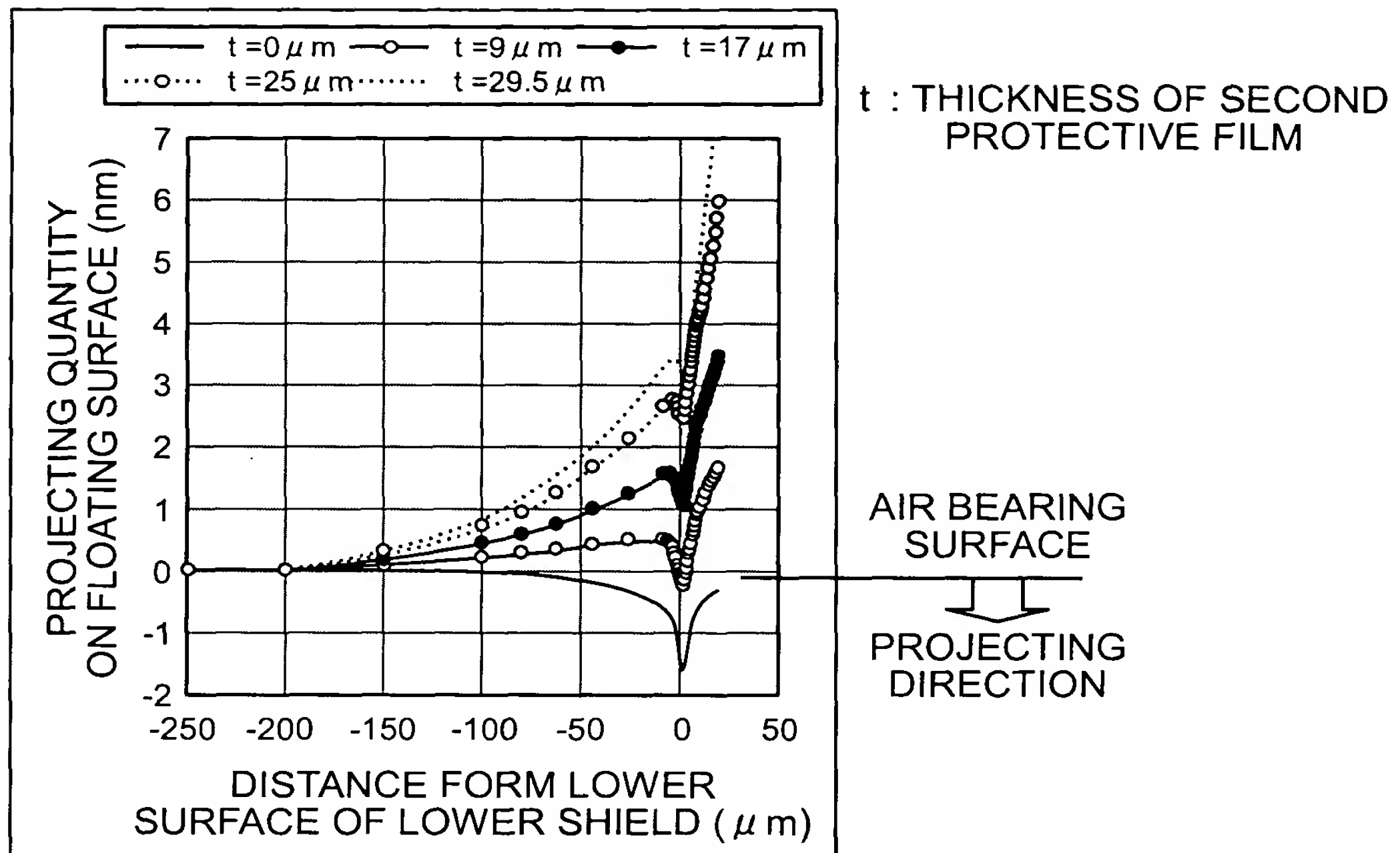


FIG.4

	THERMAL CONDUCTIVITY ($\mu\text{W}/\mu\text{mK}$)	YOUNG'S MODULUS (GPa)	POISSON RATIO	COEFFICIENT OF LINEAR EXPANSION ($1\text{e-}6/\text{K}$)
SUBSTRATE	20	390	0.22	7.1
FIRST PROTECTIVE FILM: ALUMINA	1.3	410	0.25	7.1
MAGNETIC POLE IN RETRIEVING FUNCTIONAL UNIT	35	200	0.3	12.8
MAGNETIC POLE IN WRITING FUNCTIONAL UNIT	35	144	0.3	8.5
INSULATING LAYER: RESIN	0.5	3.7	0.35	30
COIL (Cu)	403	110	0.3	16.2
SECOND PROTECTIVE FILM: $\text{Al}_2\text{O}_3/\text{SiO}_2$	1	292	0.222	4.81

FIG.5

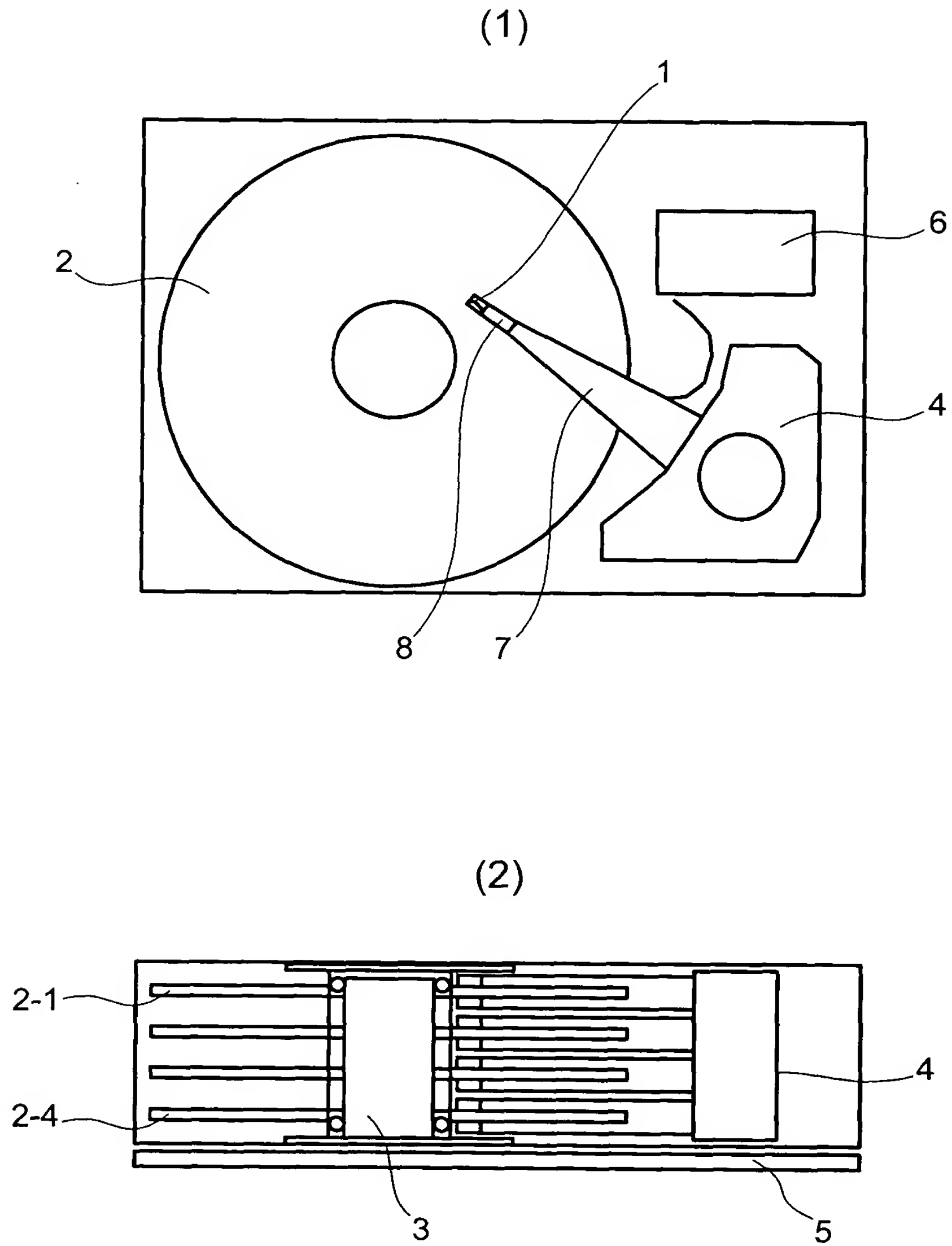


FIG.6

